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10/035,997

10/26/2001

Kevin Lauren Cote

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08/07/2006

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EXAMINER

NGUYEN, PHONG H

ART UNIT

PAPER NUMBER

3724

DATE MAILED: 08/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/035,997

Applicant(s)

COTE ET AL.

Examiner

Phong H. Nguyen

Art Unit

3724

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 and 21-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 and 21-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. In view of the Appeal brief filed on 05/19/2006 and a newly found reference, PROSECUTION IS HEREBY REOPENED. New grounds of rejections are set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

- (1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,
- (2) request reinstatement of the appeal.

If reinstatement of the appeal is requested, such request must be accompanied by a supplemental appeal brief, but no new amendments, affidavits (37 CFR 1.130, 1.131 or 1.132) or other evidence are permitted. See 37 CFR 1.193(b)(2).

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 102

3. Claims 1-5, 7-10 and 21-25 are rejected under 35 U.S.C. 102(b) as being anticipated by Bryson et al. (3,733,947), hereinafter Bryson.

Regarding claims 1 and 21, Bryson teaches a transfer apparatus comprising a transfer element (Fig. 20, 162, 203) to grip and move a sheet material article onto a side table (Figs. 1, 25, item 91), a driver to move the transfer element at a same speed as the

side table (col. 17, lines 5-20, especially lines 7-8) during a first time period. The speed of the side table and the transfer element varies as implied in col. 17, lines 5-10.

It is to be noted that in claim 1, the side table varies during its reciprocation and has the same speed as the transfer element during the cutting period.

Regarding claim 2, the driver is configured to move the sheet material to a predetermined position relative to the side table before moving the transfer element at the same speed as the side table (col. 17, lines 5-20, especially lines 5-7).

Regarding claim 3, side clamps of the side table grip the sheet material article (col. 17, lines 5-20, especially lines 7-11, also col. 17, lines 21-25).

Regarding claim 4, the side trimming operation is performed during at least a portion of the first time period (col. 17, lines 21-30).

Regarding claim 5, the driver is configured to move the transfer element at a same speed as a front table of the sheet material article trimmer when the transfer element grips the sheet material article and a front clamp of the sheet material trimmer grips the sheet material article (see col. 16, lines 31-61).

Regarding claims 7-9, the transfer element includes at least one continuous belt including an upper belt and a lower belt (Fig. 20, 162, 203) and a shuttle mechanism (Fig. 6, 73).

Regarding claims 10 and 25, the driver includes an epicycle gear unit (Fig. 6, 62) including a constant speed input member (61) and a variable speed input member (64) to vary the speed of the transfer element (claim 1, d, e).

Regarding claim 22, since the Applicant does not define the phrase “ 130 degrees of the reciprocating motion”, the Bryson’s side table 91 anticipates the Applicant’s side table. The Bryson’s side table has a reciprocating and arcuate motion. See col. 8, lines 16-23.

Regarding claim 23, a curved velocity profile exhibits at a belt roller 156 in Fig. 20.

Regarding claim 24, the transfer element increases speed when the driver is turned on and the transfer element decrease speed as the driver is turned off.

Claim Rejections - 35 USC § 103

4. Claims 1-11 and 21-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bryson et al. (3,733,947), hereinafter Bryson, in view of McCain et al. (3,732,766), hereinafter McCain, and Sarring (3,722,336)

Regarding claims 1, 2, 7 and 8, Bryson teaches a transfer apparatus comprising a transfer element (Fig. 20, elements 162 and 203) to grip and move a workpiece onto a side table (Figs. 1 and 25, element 91) and driver (the gear system in Fig. 20) configured to move the transfer element at the same speed as the side table during a first time period (col. 17, lines 5-20).

Bryson teaches the speed of the side table varying during the first time period but is silent on the speed of the transfer element.

McCain recognizes the need of varying the speed of the transfer element for matching with the cutting stroke of the side table. Therefore, it would have been obvious

to one skilled in the art to varying the speed of the transfer element so that it can match with the cutting stroke of the side table.

Sarring teaches a driver configured to move a transfer element (1010 and 1294) with variable speeds. See Figs. 1 and 38. Therefore, it would have been obvious to one skilled in the art to make the transfer element of Bryson having variable speeds as taught by Sarring to match with the cutting stroke of its side table.

Regarding claim 3, a side clamp 225 of the side table is best seen in Figs. 19, 27 and 29 in Bryson.

Regarding claim 4, a side trimming operation occurs between 280-330 degrees of the time cycle. See Fig. 38 in Sarring.

Regarding claim 5, Bryson teaches the transfer element and a front table having the same speed.

Regarding claim 6, Sarring teaches the transfer element and a receiving conveyor having the same speed.

Regarding claim 9, Sarring teaches the invention substantially as claimed except for the transfer belt including a shuttle mechanism. Applicant's admitted prior art, hereinafter AAPA, teaches the art equivalence of the belts and the shuttle mechanism. See paragraph [100]. Therefore, it would have been obvious to one skilled in the art to use a shuttle mechanism instead of belts to transfer a workpiece to the side tables since such replacement is routine skill in the art.

Regarding claim 10, Sarring teaches the invention substantially as claimed except for the driver of the transfer belts including an epicyclic gear unit. AAPA teaches using

an epicyclical gear unit for changing speed of a conveyor being well known in the art. See paragraph [102]. Therefore, it would have been obvious to one skilled in the art to include an epicyclical gear unit in the driver of Sarring since using an epicyclical gear unit for changing speed of the driver is well known in the art as taught by AAPA.

Regarding claim 11, Sarring teaches the invention substantially as claimed except for the driver of the transfer belts including servo motor. AAPA teaches using a servo motor for changing speed of a conveyor being well known in the art. See paragraph [102]. Therefore, it would have been obvious to one skilled in the art to include a servo motor in the driver of Sarring since using a servo motor for changing speed of the driver is well known in the art as taught by AAPA.

Regarding claim 21, the transfer element speed matches the side table speed between 270-310 degrees in Fig. 38 in Sarring.

Regarding claim 22, since there is no clear definition of 360 degrees of the reciprocating motion of the side table, the Examiner defines the 130 degrees of the reciprocating motion of the side table of the claimed invention being at 300 degrees in Fig. 38.

Regarding claim 23, the driver has a curved velocity profile. See Fig. 33.

Regarding claim 24, see Fig. 33.

Regarding claim 25, Bryson teaches a transfer apparatus comprising a transfer element (Fig. 20, elements 162 and 203) to grip and move a workpiece onto a side table (Figs. 1 and 25, element 91) and driver (the gear system in Fig. 20) configured to move

the transfer element at the same speed as the side table during a first time period (col. 17, lines 5-20).

Bryson teaches the speed of the side table varying during the first time period but is silent on the speed of the transfer element.

McCain recognizes the need of varying the speed of the transfer element for matching with the cutting stroke of the side table. Therefore, it would have been obvious to one skilled in the art to varying the speed of the transfer element so that it can match with the cutting stroke of the side table.

Sarring teaches a driver configured to move a transfer element (1010 and 1294) with variable speeds. See Figs. 1 and 38. Therefore, it would have been obvious to one skilled in the art to make the transfer element of Bryson having variable speeds as taught by Sarring to match with the cutting stroke of its side table.

Sarring teaches the invention substantially as claimed except for the driver of the transfer belts including an epicyclical gear unit. AAPA teaches using an epicyclical gear unit for changing speed of a conveyor being well known in the art. See paragraph [102]. Therefore, it would have been obvious to one skilled in the art to include an epicyclical gear unit in the driver of Sarring since using an epicyclical gear unit for changing speed of the driver is well known in the art as taught by AAPA.

Conclusion


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5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phong H. Nguyen whose telephone number is 571-272-4510. The examiner can normally be reached on Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Boyer Ashley can be reached on 571-272-4502. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

PN:



BOYER D. ASHLEY
SUPERVISORY PATENT EXAMINER

July 24, 2006